Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (currently amended) A method for selecting and executing inverse discrete cosine transform (iDCT) algorithms reducing iDCT execution time, said method comprising the steps of:

      a)   examining the coefficients of a DCT block to determine the position of the End of Block (EOB) coefficient;

      b)   selecting an iDCT algorithm from the set consisting of: iDCT_Normal, iDCT_high, iDCT_low, iDCT_AC and iDCT_DC; said algorithm determined by to be an iDCT_low algorithm or an iDCT_high algorithm according to the position of said EOB coefficient; and

      c)   executing said iDCT algorithm.

2.   (original) The method of claim 1, wherein said iDCT_high algorithm available to said method is determined by creating an EOB histogram of the first B-frame of a shot.

3.   (original) The method of claim 1, wherein said iDCT_low algorithm available to said method is determined by creating an EOB histogram of the first B-frame of a shot.

4.   (currently amended) A system for reducing iDCT execution time, said system comprising:

      a)   determination means for determining the position of an End of Block (EOB) coefficient in a DCT block;

      b)   selection means for selecting an iDCT algorithm to be an iDCT_low algorithm or an iDCT_high algorithm based upon the position of said EOB coefficient; and

      c)   execution means for executing said iDCT algorithm.

5.   (currently amended) The system of claim 4. A system for reducing iDCT execution time, said system comprising:

      a)   determination means for determining the position of an End of Block (EOB) coefficient in a DCT block;

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b) selection means for selecting an iDCT algorithm based upon the position of said EOB coefficient; and

c) execution means for executing said iDCT algorithm;

wherein said iDCT algorithm is determined by creating an EOB histogram of the first B-frame of a shot.

6. (currently amended) A computer readable medium containing instructions for selecting and executing inverse discrete cosine transform (iDCT) algorithms reducing iDCT execution time, said instructions performing the steps of:

a) examining the coefficients of a DCT block to determine the position of the End of Block (EOB) coefficient;

b) selecting an iDCT algorithm from the set consisting of: iDCT_Normal, iDCT_high, iDCT_low, iDCT_AC and iDCT_DC; said algorithm determined by to be an iDCT_low algorithm or an iDCT_high algorithm according to the position of said EOB coefficient; and

c) executing said iDCT algorithm.

7. (original) The method of claim 2 wherein said iDCT_high algorithm is based upon an EOB coefficient of 39 or 40.

8. (original) The method of claim 3 wherein said iDCT_low algorithm is based upon an EOB coefficient of 14 or 25.

9. (original) The medium of claim 6 wherein said iDCT_high algorithm is based upon an EOB coefficient of 39 or 40.

10. (original) The medium of claim 6 wherein said iDCT_low algorithm is based upon an EOB coefficient of 14 or 25.

11. (currently amended) A system for reducing iDCT execution time, said system comprising:

a) a plurality of iDCT algorithms comprising an iDCT_high algorithm and an iDCT_low algorithm;

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b) a switch for selecting a selected algorithm from said plurality of iDCT algorithms; and

c) a computer processor for executing said selected algorithm.

12. (currently amended) The system of claim 11 wherein said switch accepts as input:

a) a block of DCT coefficients;

b) an End of Block (EOB) address; and

c) a picture type rate.

13. (currently amended) The system of claim 11 wherein said plurality of iDCT algorithms further comprises:

iDCT_Normal, iDCT_high, iDCT_low, iDCT_AC and iDCT_DC.

14. (currently amended) The system of claim 13 A system for reducing iDCT execution time, said system comprising:

a) a plurality of iDCT algorithms comprising iDCT_Normal, iDCT_high, iDCT_low, iDCT_AC and iDCT_DC;

b) a switch for selecting a selected algorithm from said plurality of iDCT algorithms, wherein said switch accepts as input:

1) a block of DCT coefficients;

2) an End of Block (EOB) address; and

3) a picture type rate; and

c) a computer processor for executing said selected algorithm;

wherein said iDCT_high algorithm is selected based on an EOB value of 39 or 50.

15. (currently amended) The system of claim 13, A system for reducing iDCT execution time, said system comprising:

a) a plurality of iDCT algorithms comprising iDCT_Normal, iDCT_high, iDCT_low, iDCT_AC and iDCT_DC;

d) a switch for selecting a selected algorithm from said plurality of iDCT algorithms, wherein said switch accepts as input:

1) a block of DCT coefficients;

2) an End of Block (EOB) address; and

3) a picture type rate; and

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c)   a computer processor for executing said selected algorithm;

wherein said iDCT_low algorithm is selected based upon an EOB value of 14 or 25.

16.   (currently amended) ~~The system of claim 13~~ A system for reducing iDCT execution time,
said system comprising:

a)   a plurality of iDCT algorithms comprising iDCT Normal, iDCT high,
iDCT low, iDCT AC and iDCT DC;

e)   a switch for selecting a selected algorithm from said plurality of iDCT algorithms,
wherein said switch accepts as input:

1)   a block of DCT coefficients;

2)   an End of Block (EOB) address; and

3)   a picture type rate; and

c)   a computer processor for executing said selected algorithm;

wherein said iDCT_low and iDCT_high algorithms are determined based upon an EOB
histogram of the first B-Frame of a shot.

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